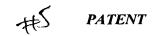


Practitioner's Docket No. <u>49663 (71758)</u>

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Application No.: Filed: For: Heather J. Belmont, et al. 10/024,648 December 19, 2001 TRANSGENIC ANIMALS COMPRISING A HUMANIZED IMMUNE SYSTEM

Donna R. Davis

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service in an envelope as "Express Mail Post Office to Addressee", Express Mail Label No. EL931635034US addressed to: U.S. Patent and Trademark Office, 2011 South Clark Place, Customer Window, BOX SEQUENCE, Crystal Plaza Two, Kobby 1803, Arlington, VA 22202.

By:

(Date of Deposit: May 14, 2002)

U.S. Patent and Trademark Office 2011 South Clark Place Customer Window, BOX SEQUENCE, Crystal Plaza Two, Lobby 1B03 Arlington, VA 22202

AMENDMENT

Sir:

Applicant is in receipt of the Notice to File Missing Parts of Non Provisional Application, mailed on February 14, 2002. The following Amendment is provided to comply with 37 C.F.R. 1.821-1.825 "SUBMISSION OF "SEQUENCE LISTING," COMPUTER READABLE COPY, AND/OR AMENDMENT PERTAINING THERETO FOR BIOTECHNOLOGY INVENTION CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE."

Please amend the above-identified application as follows.

IN THE SPECIFICATION:

On page 34, lines 22 - 24, please amend the following:

In re application of: Heather J. Belmont, et al. Application No.: 10/024,648 Page 2 of 8

. .

(AMENDED) The pPUR vector is modified to include a unique *Not*I site by cutting with *Eco*RI and ligating in the oligonucleotide, AATTGCGGCCGC (SEQ ID NO:1).

On page 34, lines 27 - 28, please amend the following:

(AMENDED) TKf: ACTG GGATCCAAAT GAGTCTTCGG (SEQ ID NO: 2). TKr: ACTG GCGGCCGC CAAACGACCC AACACCCGTG (SEQ ID NO:3).

On page 35, lines 1 -7, please amend the following:

(AMENDED) 5'-CC CACCTGGATC TCCCAGATTT GTGAGGAAGG TTGCTGGAGA GC-3' (MUSTCRA 89394-89437, Cα exon 4) (SEQ ID NO: 4)

and for the region 5' to $C\alpha \text{ exon } 1$:

5'-GGAAA GCCCTGCTGG CTCCAAGATGGCTGAGGGAA AGGTCTACGG-3' (MUSTCRA 81681-81725, 5' to C α exon 1) (SEQ ID NO: 5).

On page 35, lines 14 -16, please amend the following:

(AMENDED) PCa3'f : 5'-TAGT*GGATCC* CATGCAGAGAGAAACCGAAGTACGTG-3' (SEQ ID NO: 6).

PCa3'r : 5'-GCTACAGAGTGAAGTCATGGATCCTG-3' (SEQ ID NO: 7).

On page 35, lines 24 -26, please amend the following:

(AMENDED) PCa5'f: 5'-GGTCT GTGTTCCATA TGACGTCAGT ACG-3' (SEQ ID NO:

8)

PCa5'r: 5'-ATTACATATGGTCCTAACTTAGGTCAGAACTCAGATGC-3' (SEQ ID NO: 9)

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i .

On page 38, line 23, please amend the following: (AMENDED) Cα exon2 probe: 5'-CG TTCCCTGTGA TGCCACGTTG ACTGAGAAAA GCTTTG-3' (SEQ ID NO: 10).

On page 39, lines 17-21, please amend the following:

(Amended) Cβ1: 5'- TGAGAAAGTC CAAAAACTCG GGGTACCATT CCACCATAGA-3' (AE000665 158041-158080) (SEQ ID NO: 11).

Cβ2: 5'-GGAGT TAACCTGGTT GTGTCTCAGC AGTTTCTTTG GACTCCTGTG-3' (AE000665 168427-168471) (SEQ ID NO: 12)

On page 39, lines 31- 32, please amend the following:

(AMENDED) B/N #1 (top): 5'-GAT CCG TTA ACG C-3' (SEQ ID NO: 13) B/N #2 (bottom): 3'-GC AAT TGC GCC GG-5' (SEQ ID NO: 14)

On page 41, lines 17- 20, please amend the following:

(AMENDED) PRIMb5'f: 5'-GGATTCA AAGGTTACCT TATGTGGCCA C-3' (SEQ ID NO: 15)

PRIMb5'r: 5'-GCCCC AAAGGCCTAC CCGCTTCC -3' (SEQ ID NO: 16)

On page 43, lines 22- 25, please amend the following:

(AMENDED)

pYAC4 Oligo-(2) 5' AATTCggCgCgCgCCgCggggCCggCCg-3'(SEQ ID NO: 18)

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. .

On page 46, lines 20- 24, please amend the following:

(AMENDED) Screening oligo #1- 5'- GTCTCTACTT TACTAAAAAT ACAAAAATTA GCCAGGTGTG GTGGTG-3' (SEQ ID NO: 19)

Screening oligo #2-5'- GTCACAGGGC TGAGGGAAGG AGACAAGAGC CTGGACAGCA-3' (SEQ ID NO: 20)

On page 56, lines 3- 5, please amend the following:

(AMENDED) V β (near C term) VW510: ATCCTTTCTCTTGACCATGGCCATC (SEQ ID NO: 21)

Va (near C term) VW512: GCTGGACCACAGCCGCAGCGTCATG (SEQ ID NO: 22)

On page 58, lines 19- 21, please amend the following:

(AMENDED) Recombinant bacteria containing the HLA-A2 gene are detected by colony hybridization (Hanahan, D, and M. Meselson (1980) Gene **10**:63-67), using the synthetic oligonucleotide 5'-TGTCTCCCCGTCCCAAT-3' (SEQ ID NO: 23) as a probe.

REMARKS

The sequence disclosure has been amended to comply with the requirements of 37 CFR 1.821 through 1.825. No new matter is being added by virtue of the compliance with the

In re application of: Heather J. Belmont, et al. Application No.: 10/024,648 Page 5 of 8

requirements as set forth in the "Notice to File Missing Parts of Non Provisional Application."

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned:

"Version with markings to show changes made."

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

Robert L. Buchanan, Reg. No. 40,927 Attorney for Applicants EDWARDS & ANGELL, LLP P.O. Box 9169 Boston, MA 02209

DATE: May 14, 2002

Tel. No.: (617) 439-4444

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In re application of: Heather J. Belmont, et al. Application No.: 10/024,648 Page 6 of 8

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

IN THE SPECIFICATION:

On page 34, lines 22 - 24, have been amended as follows:

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EcoRI and ligating in the oligonucleotide, AATTGCGGCCGC (SEQ ID NO:1).

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and for the region 5' to $C\alpha$ exon 1:

5'-GGAAA GCCCTGCTGG CTCCAAGATGGCTGAGGGAA AGGTCTACGG-3' (MUSTCRA 81681-81725, 5' to Cα exon 1) (SEQ ID NO: 5).

On page 35, lines 14 -16, have been amended as follows:

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PCa3'r : 5'-GCTACAGAGTGAAGTCATGGATCCTG-3' (SEQ ID NO: 7).

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In re application of: Heather J. Belmont, et al. Application No.: 10/024,648 Page 7 of 8

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On page 43, lines 22- 25, have been amended as follows: (AMENDED)

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In re application of: Heather J. Belmont, et al. Application No.: 10/024,648 Page 8 of 8

pYAC4 Oligo-(2) 5' AATTCggCgCgCcCcgCggggCCggCCg-3'(SEQ ID NO: 18)

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